Docket No. 500862000700

Appln. Serial No. 09/530,298

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Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

The List of Claims

- 1. (currently amended) A compound of formula E-C_a-R-C_b-A, wherein E is a therapeutic or diagnostic agent, R is a reactive group, Cb and Ca are optional first and second connecting respectively, and A is an affinity group comprising any molecule or part of a molecule possessing specific binding determinants for a target molecule having an affinity for human scrum albumin, wherein affinity group A comprises a sequence of amino acid residues - O1-O2-X1. X2 B in which the amino acid residues are independently selected from the group of all twenty naturally occurring amino acids.
- 2. (previously amended) A compound according to claim 58, wherein amino acid residue O1 is selected from the group consisting of phenylalanine, arginine, glutamine, tyrosine, glutamic acid and tryptophan; amino acid residue O2 is selected from the group consisting of leucine, arginine, glutamic acid, tryptophan and phenylalanine; amino acid residue X_1 is selected from the group consisting of phenylalanine, tryptophan, methionine and tyrosine; amino acid residue X2 is selected from the group consisting of serine, arginine and glutamic acid; and amino acid residue B is selected from the group consisting of serine, arginine and glutamic acid.

3. (previously cancelled)

4. (previously amended) A compound according to claim 58, wherein one of the five amino acid residues is an L amino acid residue and the other four amino acid residues are D amino acid residues.

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 (previously amended) A compound according to claim 2, wherein the L-amino acid residue is selected from the group consisting of the amino acid residue O₂, the amino acid residue X₁, and the amino acid residue X₂.

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- 6. (previously amended) A compound according to claim 58, wherein one of the five amino acid residues is a D-amino acid residue and the other four amino acid residues are L-amino acid residues.
- (original) A compound according to claim 6, wherein the D-amino acid residue is selected
 from the group consisting of the amino acid residue O₂, amino acid residue X₁, and
 amino acid residue X₂.
- (original) A compound according to claim 7, wherein the D-amino acid residue is the amino acid residue O₂.
- (previously amended) A compound according to claim 58, wherein O₁ is phenylalanine and
 O₂ is leucine.
- (previously amended) A compound according to claim 58, wherein O₁ is arginine and O₂ is arginine.
- 11. (previously amended) A compound according to claim 58, wherein O₁ is glutamine and O₂ is glutamic acid.
- 12. (previously amended) A compound according to claim 58, wherein O₁ is glutamic acid and O₂ is tryptophan.
- 13. (previously amended) A compound according to claim 58, wherein O₁ is tryptophan and O₂ is tryptophan.

- (previously amended) A compound according to claim 58, wherein O₁ is tryptophan and O₂ is glutamic acid.
- 15. (previously amended) A compound according to claim 58, wherein X1 is tyrosine.
- 16. (previously amended) A compound according to claim 58, wherein X2 is glutamic acid.
- 17. (previously amended) A compound according to claim 58, wherein B is glutamic acid.
- 18. (previously amended) A compound according to claim 58, wherein O_1 is phenylalanine, O_2 is D-leucine, X_1 is tyrosine, X_2 is glutamic acid, and B is glutamic acid.
- (previously amended) A compound according to claim 58, wherein the amino acid residue B
 is a C-terminal amino acid residue.
- (original) A compound according to claim 19, wherein the affinity group comprises the amino acid sequence -O₁-O₂-X₁-X₂-B-NH₂.
- 21. (previously amended) A compound according to claim 58, wherein the reactive group comprises a functional group selected from the group consisting of carboxy, phosphoryl, alkyl esters, thioesters, phosphoesters, ortho esters, imidates, mixed anhydrides, amides, thioamine and disulphides.
- 22. (previously amended) A compound according to claim 21, wherein C_b is absent and the reactive group is bonded directly to the O₁ amino acid residue in the affinity group.
- 23. (original) A compound according to claim 22, wherein the reactive group is bonded to the O₁ amino acid residue by an amide linkage.

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24. (previously amended) A compound according to claim 21, wherein the reactive group has the formula -X-R₁-C(O)-, wherein R₁ comprises a substituted or unsubstituted aromatic group and X is selected from the group consisting of S, O and N.

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- 25. (original) A compound according to claim 24, wherein X is bonded directly to an aromatic carbon atom in R₁.
- 26. (original) A compound according to claim 24, wherein R₁ is unsubstituted phenyl.
- 27. (previously amended) A compound according to claim 26, wherein -X- and -C(O)- are bonded to the phenyl in a para configuration.
- 28. (previously amended) A compound according to claim 24, wherein R₁ is phenyl substituted with one or more groups selected from the group consisting of a halogen, NO₂, SO₂NH₂, SO₂NHF, CF₃, CCl₃, CBr₃, C=N, SO₃H, CO₂H, CHO, OH, NHCOCH₃, OCH₃, CH₃ and CH₂CH₃.
- 29. (original) A compound according to claim 24, wherein the reactive moiety is bonded directly to the O₁ residue via the carboxyl carbon.
- (previously amended) A compound according to claim 21 wherein C_b is present.
- 31. (previously amended) A compound according to claim 28, wherein C_b is bonded to the reactive group via an ester, thioester, amide, sulfonate ester or sulfonamide linkage.
- 32. (previously amended) A compound according to claim 30, wherein C_b is bonded to the O₁ amino acid residue in the affinity group via an ester, thioester, amide, sulfonamide, urea, thiourea or carbamate linkage.
- 33. (previously amended) A compound according to claim 30, wherein C_b comprises a backbone chain of between about 1 and about 25 atoms.

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- 34. (previously amended) A compound according to claim 33, wherein C_b comprises a backbone chain of between about 2 and about 16 carbon atoms.
- 35. (previously amended) A compound according to claim 30, wherein C_b comprises an unsaturated carbon atom backbone chain of between about 1 and about 25 atoms.

Claims 36-39 (previously cancelled)

- 40. (previously amended) A compound according to claim 58 wherein C₂ is present.
- 41. (previously amended) A compound according to claim 40, wherein C_a is bonded to E by an ester, thioester, amide, sulfonate ester or sulfonamide linkage.
- 42. (previously amended) A compound according to claim 40, wherein C_a is bonded to the reactive group by an ester, thioester, amide or sulfonate ester linkage.
- 43. (previously amended) A compound according to claim 40, wherein C_a comprises a backbone chain of between about 1 and about 25 atoms.
- 44. (previously amended) A compound according to claim 43, wherein C_a comprises a backbone chain of between about 2 and about 16 carbon atoms.
- 45. (previously amended) A compound according to claim 40, wherein C_a comprises an unsaturated carbon atom backbone chain of between about 1 and about 25 atoms.
- 46. (previously amended) A compound according to claim 1, wherein the diagnostic agent comprises biotin.
- 47. (previously amended) A compound according to claim 46, wherein biotin is bonded directly to the reactive group by an ester, thioester or amide linkage.

48. (previously amended) A compound according to claim 46, wherein the reactive group has the formula -X-Ph-C(O)-, and wherein X is oxygen, sulfur or nitrogen.

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- 49. (previously amended) A compound according to claim 48, wherein the -X- and -C(O)- on the phenyl group are bonded in a para configuration.
- 50. (previously amended) A compound according to claim 47 wherein C₂ is present.
- 51. (previously amended) A compound according to claim 50, wherein C₂ is bonded to the biotin group by an amide linkage.
- 52. (previously amended) A compound according to claim 50, wherein C_a is -NH-(CH₂)_n-C(O)-, wherein n is an integer between 1 and 25.
- 53. (previously amended) A compound according to claim 52, wherein C_a is -NH-(CH₂)₅-C(O)-.
- 54. (previously amended) A compound according to claim 52, wherein C_a is -NH-CH₂-C(O)-.
- 55. (original) A compound selected from the group consisting of biotin-S-Ph-C(O)-F/YEE-NH₂, biotin-OPh-C(O)-F/YEE-NH₂, LC-biotin-S-Ph-C(O)-F/YEE-NH₂, biotin-Gly-OPh-C(O)-F/YEE-NH₂, fluorescein-Gly-OPh-F/YEE-NH₂, LC-biotin-OPh-C(O)-F/YEE-NH₂, argatroban-AEA₃-βAla-Gly-OPh-C(O)-F/YEE-NH₂, and fluorescein-thiourea-AEA₃-Gly-OPh-C(O)-F/YEE-NH₂.

Claims 56 and 57 (previously cancelled)

58. (previously introduced) A compound as claimed in claim I, wherein the target molecule comprises human serum albumin, and the affinity group A comprises a sequence of amino acid

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residues -O₁-O₂-X₁-X₂-B- wherein the amino acid residues are independently selected from the group consisting of all twenty naturally occurring amino acids in either L or D configuration.

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59. (previously introduced) A compound as claimed in claim 1, wherein E is Argatroban, C_a is AEA₃-βAla-Gly, R is -O-Ph-C(O)-, C_b is absent, and A is FlYEE-NH₂.